

525, 462

Rec'd PCT/PTO

1 SEP 2005

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
18 March 2004 (18.03.2004)

PCT

(10) International Publication Number
WO 2004/021812 A1

(51) International Patent Classification⁷:

A41D 1/06

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:

PCT/KR2003/001838

(22) International Filing Date:

5 September 2003 (05.09.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

20-2002-0026633

5 September 2002 (05.09.2002) KR

(71) Applicant and

(72) Inventor: KIM, Tae Won [KR/KR]; B1 Gampok B/D,
1427-6, Seocho 1-dong, Seocho-gu,, Seoul 137-864 (KR).

(74) Agent: HAN, Sang Hyuk; 4F, Hyesung B/D, 115-12,
Nonhyeon-dong, Kangnam-gu, Seoul 135-821 (KR).

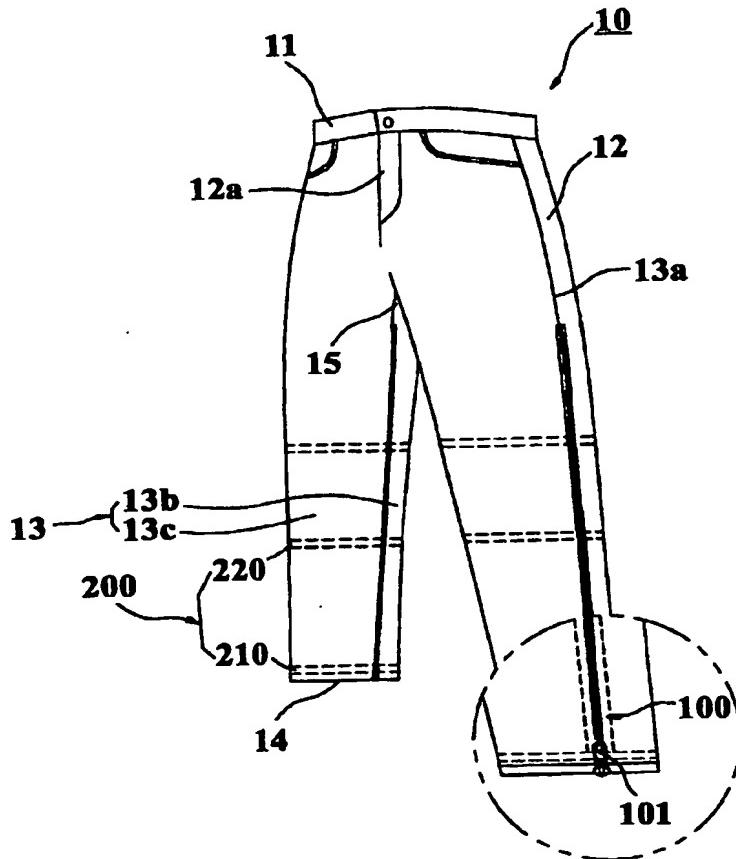
(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

[Continued on next page]

(54) Title: BLUE JEANS WHICH HEM LENGTH IS ADJUSTABLE



(57) Abstract: The present jeans adjusts the length of the jean hem in various lengths according to the surroundings, it is possible to produce various color compared to the outer color, users don't need to prepare spare clothes at the change of season.

WO 2004/021812 A1

BEST AVAILABLE COPY

WO 2004/021812 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

BLUE JEANS WHICH HEM LENGTH IS ADJUSTABLE**BACKGROUND OF THE INVENTION****Field of the Invention:**

This invention is generally relates to blue jeans, and more particularly to blue
5 jeans which hem length is adjustable. The purpose of the invention is to enable user to
adjust the length of jean hem with zipper arranged vertically in both side of the jean, thus
enabling user to produce desirable jean style.

Description of the Prior Art:

In general, blue jean is a kind of clothes, which is used to hide user's leg and the
10 genital organs. At the same time, it protects user from external shock. Blue jean has
various lengths according to season and has airing.

However, in above-mentioned formal blue jean, various jeans with various
lengths are needed to produce various styles according to season. especially in the
change of season, users feel inconvenience because they can't cope with the weather.
15 Separate clothes which produces various styles according to surroundings is posted in
98-65347, official report of utility model.

According to the Fig.1, in formal clothes, zipper (SA1) is attached to the end
(EL) of the required part such as knee, and the other zipper, which is contrived to couple
with formal zipper, is arranged in top part of the sleeve or hem, thus free zipping or
20 unzipping is possible.

However, in the above-mentioned formal separate clothes, parts of the clothes are

required to keep in separate place, and clothes can be separated while using thus user feel uncomfortable, and user always need to keep the parts in change season.

SUMMARY OF THE INVENTION

This invention is generally relates to blue jeans which hem length is adjustable.

- 5 The purpose of the invention is to enable user to adjust the length of jean hem with zipper arranged vertically in both side of the jean, thus enabling user to produce desirable jean style.

In order to achieve the above object, the present blue jean, which has adjustable hem length, has following features;

- 10 Release the zipper arranged in both side of the joining part, which is vertically formed to the femoral region, to desiring length, and then fold and bind the first and the second jean tube into the jean hem.

According to above, user can adjust the length of the blue jeans easily and produce free style. At the same time, this invention improves airing.

15

BRIEF DESCRIPTION OF THE DRAWINGS

Fig.1 is a side view of the formal blue jeans.

Fig.2 is a convergent view of the outward of the blue jeans

Fig.3 is a detailed vied of Fig.2-A, which shows the function of the invention.

Fig.4 is a cross-sectional view of the other example of the present invention.

20

Fig.5 is a side view of the other example of the present invention.

***DESCRIPTION OF MAIN PART OF THE DRAWINGS ***

10;Blue jeans	11;Weist part
12;Hip part	13;Jean hem
13a;the joining part	13b,13c;the first and the second jean tube
5 14;the edge of the jean tube	100;zipper
200;fixing device	210,220;the first and the second sticking part
300;collar layer	

DETAILED DESCRIPTION

10 This invention is generally relates to blue jeans, and more particularly to blue jeans which hem length is adjustable. The purpose of the invention is to enable user to adjust the length of jean hem with zipper arranged vertically in both side of the jean, thus enabling user to produce desirable jean style.

15 TECHNICAL SOLUTION THAT THIS INVENTION ACHEIVES

To solve problems of the existing blue jean;

This invention makes blue jean, which adjusts hem in various lengths according to surroundings, thus enables to produce various styles.

In addition, this invention supplies blue jean, which adjusts hem length freely for
20 users not to prepare additional clothes owing to surrounding circumstance and

temperature.

DETAILED EMBODIMENT OF THE INVENTION

To achieve above-mentioned purpose, this invention has following features;

In blue jean consisted of the waist part, the hip part at which covers user's hip, and of
5 jean hem arranged vertically on the above-mentioned hip part,

Above-mentioned blue jean has the first and the second jean tube divided by the joining part which is vertically formed on the femoral region, and zipper is arranged in both side of the first and the second jean tube in order to cut out above-mentioned jean hem from low to high.

10 Moreover, above-mentioned blue jean includes more than one fixing device inside of top of the jean hem in order to fold and bind and fix the zipper, after releasing the zipper at certain length.

Also, above-mentioned fixing device is consisted of a pair of magic tape, which is divided to the first and second sticking part.

15 In addition, in above-mentioned fixing device, a pair of prominence and depression snaps button is arranged and divided to the first and the second sticking part.

Moreover, the blue jean includes collar layer vertically in one side of the above-mentioned zipper, in order to prevent exposure of the zipper.

20 And, the present blue jean includes stick-upholding unit in the end of the first and the second jean tube in order for jean hem not to flutter by the zipper but to improve airing.

One of the desiring examples of the invention is explained with the drawing.

Fig.2 is a convergent view of the outward of the blue jeans, Fig.3 is a detailed view of Fig.2-A, which shows the function of the invention, Fig.4 is a cross-sectional view of the other example of the present invention.

Referring to Fig.2 or Fig.3, the present blue jean (10) includes the waist part(11) which covers user's hip, and hip part (12) which is made under the waist part(11) in tube shape and has zipper (12a), and jean hem(13) which is divided to both under side of the hip part (12).

Jean hem(13) is divided to two sides and the joining part (13a) is combined to the end with thread. By the zipper (100), which is inside of the joining part(13a), the first 10 and the second jean tube(13b)(13c) are divided.

The zipper (100) is extended from the edge of the jean tube(14) to the femoral region(15) under the hip part (12), and the zipper handle (101) is arranged in the edge of the jean tube(14) in order to lock or unlock the zipper (100). The zipper is released from low to high.

15 Additionally, more than one fixing device (200) is shaped in the jean hem(13) in low and high directions.

This fixing device (200) is normal magic tape. The first sticking part (210) is shaped in the lower part of the edge of the jean tube(14) and the second part (220) in the higher part.

20 The first sticking part (210) is normal magic tape, and much of projection made of resin plastic is in the tape. In the second sticking part (220), much of fiber hair is made to couple with the projection. No matter where the projection or hair is, it is consisted of a pair of the first and the second sticking part (210)(220).

Above-mentioned fixing device (200) can be made in various shapes with current technique and skill. For example, snaps button, which is consisted of a pair of prominence and depression, can be used.

Referring to the Fig.3, effect of the present blue jean (10) is explained below.

- 5 Firstly, zip up the handle (101) under the jean hem(13), then the hook unit(101a) is released and freed from the zipper (100). Move this zipper handle (101), then the first and the second jean tube(13b)(13c) of the jean hem(13) are separated to both side, and it is easy to fold and bind the first and the second jean tube(13b)(13c) into the jean hem(13).

In this way, fold the edge of the jean tube(14) under the separated first and second jean tube(13b)(13c) inside, and attach the first sticking part(210) prepared inside of the edge of the jean tube(14) to the second sticking part(220) arranged inside of the jean hem(13). Finally, move zipper handle down, and face it downward, then the released projection (101a) is applied in the zipper (100) and length adjustment is finished.

Likewise, length of the jean is adjusted freely by the zipper (100) arranged in 15 both sides of the jean hem(13), and it is possible to produces various fashion styles such as calf or ankle jean with merely one jean since it does not fall off due to the fixing device (200) situated inside.

Fig.4 shows the other example of the blue jean (10), that is, collar layer (300) is arranged in order to prevent exposure of zipper (100) and explain is followed.

- 20 Put one side of the collar layer (300) to one side of the joining part (13a) of the divided jean hem(13) and fix it with thread. Inner surface of the other side, the first sticking part (310) is arranged.

In addition, in the joining part(13a) of the other side, the second sticking part

(320) is arranged along the vertical direction of the jean hem(13). This attaches with the first sticking part (310) made inner surface of the above-mentioned collar layer (300).

As mentioned in above example, after adjusting the length of the jean hem, collar layer (300) covers zipper (100) and conceals it.

5 This collar layer (300) can be same in color of jean (10) or different from the jean (10) in order to produce more polishing mood. Furthermore, it fixes zipper from released freely.

Referring to the Fig.5, it shows the other example of the present invention. Arrange stick-upholding unit(400) in the edge of the jean tube(14) under the jean hem(13), and
10 move up zipper (100). Then it is easy to circulate air in the jean without folding and binding the jean hem(13).

Firstly, move up zipper handle (101) arranged under the joining part(13a), and divide the first and the second jean tube(13b)(13c), then stick the stick-upholding unit(400) arranged under.

15 Stick-upholding unit(400) is consisted of the first sticking part (410) fit under the first 1jean tube(13b), and the second sticking part (420) arranged in the second jean tube(13c).

This stick-upholding unit(400) has much resin plastic projection in the first sticking part (410) like above-mentioned fixing device (200). In the second sticking part (420), fiber hair is made to stick to the projection of the first sticking part (410).

20 Stick-upholding unit(400) can be made of and changed to various ways such as snaps button. As well as, make button hole in the first sticking part (410) and arrange button in the second sticking part (420) in accordance with the hole.

In addition, arrange many above-mentioned stick-upholding units (400) upward and downward, and then prevent the jean hem flutter when zipper (100) is released. Also improve airing.

This invention is not limited in the certain examples of the article. Anyone who
5 has usual knowledge of the technique field where this invention belongs to, can change
and practice the invention, thus such change is in the bounds of the claims.

CLAIMS**WHAT IS CLAIMED IS:**

1. In blue jean consisted of the waist part, and hip part which covers user's hip, jean hem which is vertically arranged in both side of the hip part,
- 5 Blue jean which has the first and the second jean tube that is divided by the joining part formed vertically in the femoral region under the hip part. Blue jean which has zipper arranged in both side of the above-mentioned first and second jean tube in order to zip and unzip from the lower end to upward, thus adjusts the length of the jean hem.
- 10 2. In the Claim 1,
Blue jean which hem length is adjustable, that is, blue jean includes more than one fixing device in order to fold and bind and fix the zipper after releasing the zipper inside of the jean hem at certain length.
- 15 3. In the Claim 1,
Blue jean which hem length is adjustable, and has fixing device, that is, the fixing device which is divided to the first and the second sticking part in order to arrange a pair of magic tape.
- 20 4. In the Claim 2,
Blue jean, which hem length is adjustable, that is, the above-mentioned fixing device has the first and the second sticking part in order to arrange a pair of prominence and depression snaps button.
5. In the Claim 1,

Blue jean, which hem length is adjustable, that includes collar layer vertically arranged in one side of the zipper in order to prevent exposure of the zipper.

6. In the Claim 1,

Blue jean, which hem length is adjustable, that includes stick-upholding unit under the
5 first and the second jean tube in order for the jean hem not to flutter because of the
zipper, and to improve airing.

FIG. 1

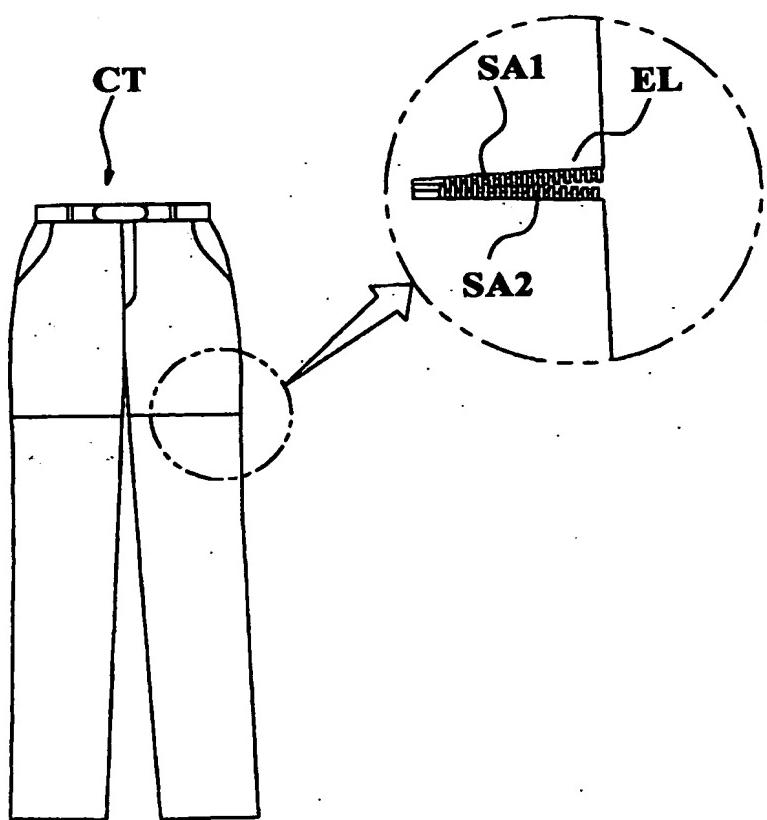


FIG. 2

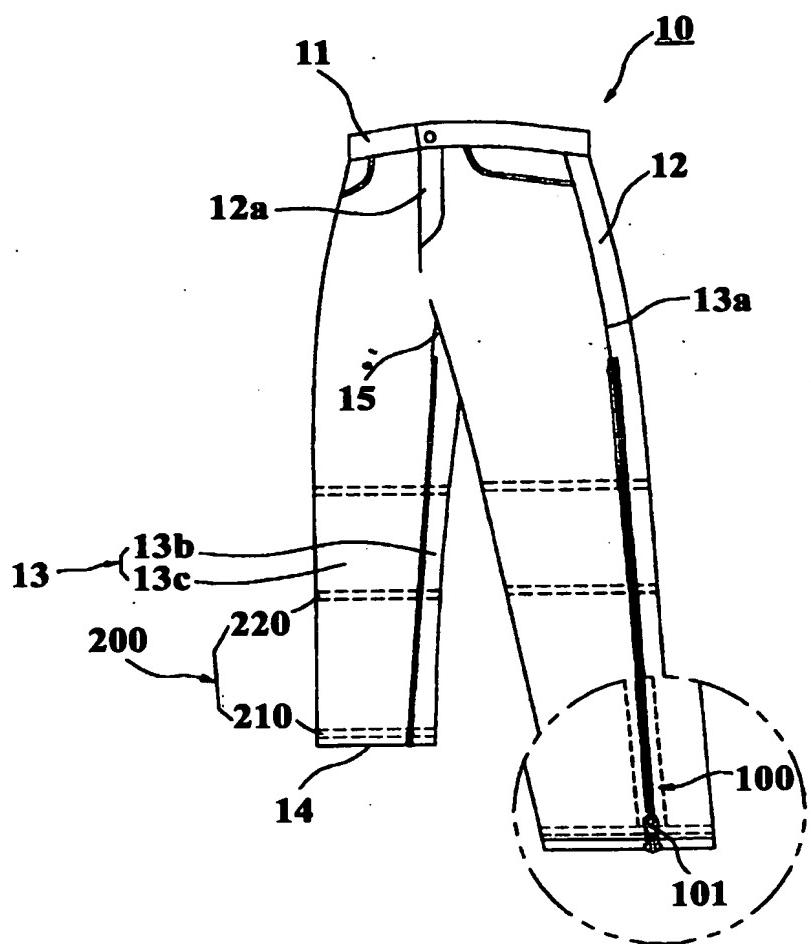


FIG. 3

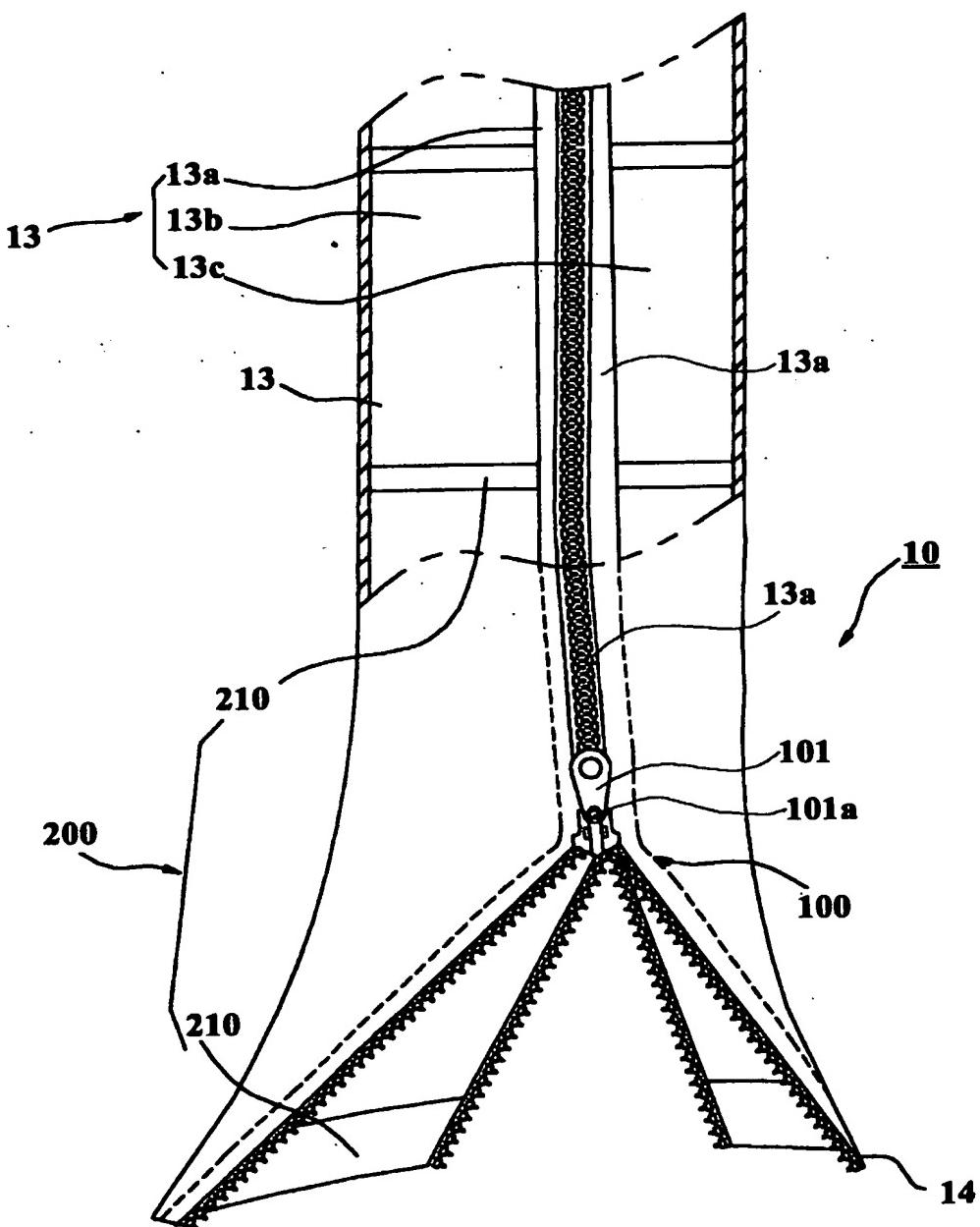


FIG. 4

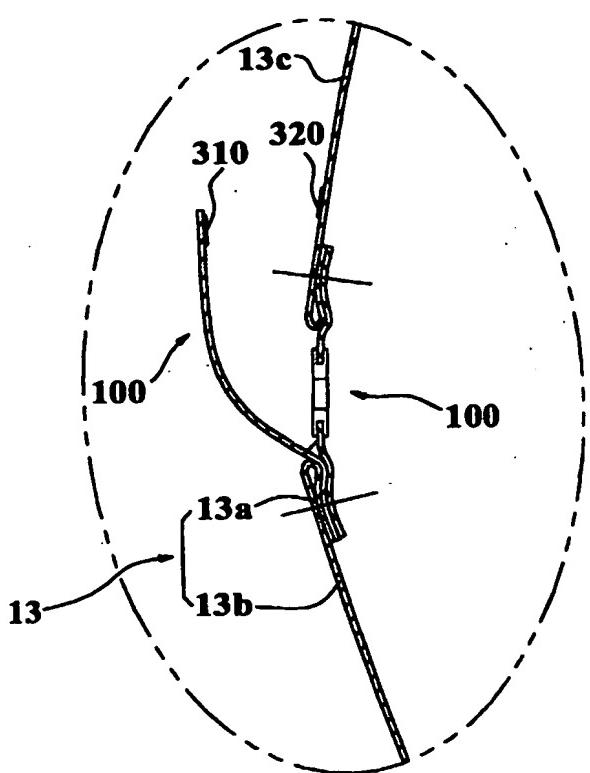
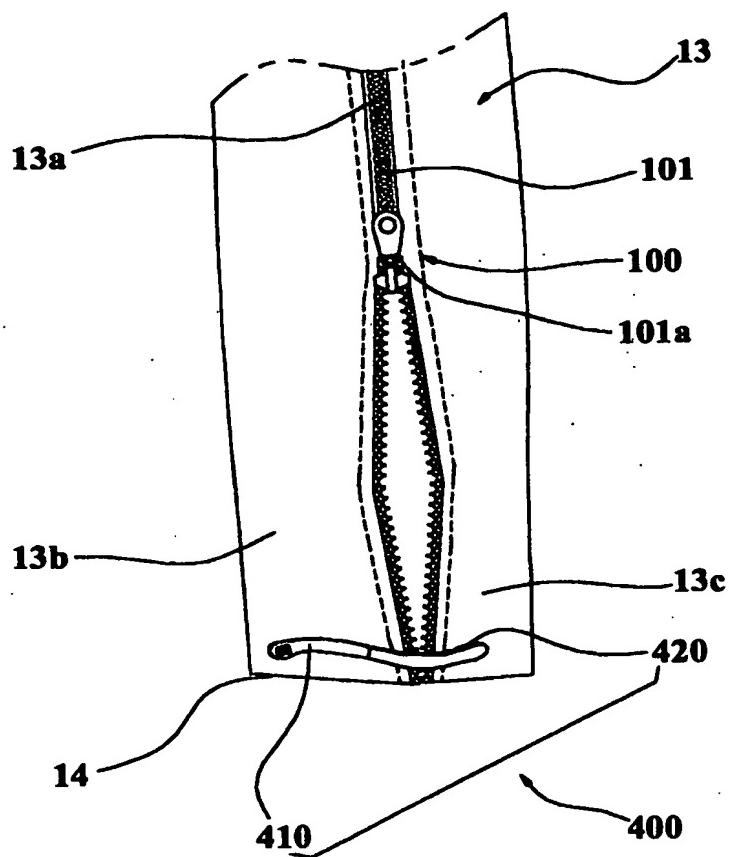


FIG. 5



INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR03/01838

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 A41D 1/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A41D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

KR : IPC as above

jp : IPC as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 63-175109 U (KAZUSE) 14 NOVEMBER, 1988 (14. 11. 1988) see the whole document	1
Y	KR 20-0193746 Y1 (YOON, JOONG HYUN) 16 AUGUST, 2000 (16. 08. 2000) see the whole document	1
A	JP 51-95414 U (MARU TOMI IRYO K.K) 31.JULY, 1976 (31. 07. 1976) see the whole document	1

Further documents are listed in the continuation of Box C.

See patent family annex.

- * Special categories of cited documents:
- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

26 DECEMBER 2003 (26.12.2003)

Date of mailing of the international search report

26 DECEMBER 2003 (26.12.2003)

Name and mailing address of the ISA/KR


Korean Intellectual Property Office
920 Dunsan-dong, Seo-gu, Daejeon 302-701,
Republic of Korea

Faxsimile No. 82-42-472-7140

Authorized officer

PARK, Young Joon



Telephone No. 82-42-481-5618

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- BLACK BORDERS**
- IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- FADED TEXT OR DRAWING**
- BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- SKEWED/SLANTED IMAGES**
- COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- GRAY SCALE DOCUMENTS**
- LINES OR MARKS ON ORIGINAL DOCUMENT**
- REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.